

DOCUMENT: 830-263/016

**FEDERAL-PROVINCIAL-TERRITORIAL CONFERENCE OF MINISTERS
OF ENERGY**

Nova Scotia's Energy Opportunities

Nova Scotia

Ottawa, Ontario
January 30, 1987

NOVA SCOTIA'S ENERGY OPPORTUNITIES

BY

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JANUARY 30, 1987

IN MY INTRODUCTORY COMMENTS THIS MORNING, I INDICATED THAT ENERGY SECURITY FOR ATLANTIC CANADA REQUIRES NOT ONLY ADVANCING THE DEVELOPMENT OF OUR OFFSHORE OIL AND GAS RESOURCES, BUT ALSO RELIES ON THE USE OF OUR OTHER INDIGENOUS RESOURCES AND THE EFFICIENT MANAGEMENT OF OUR ENERGY DEMANDS. COAL PLAYS A CENTRAL ROLE IN NOVA SCOTIA'S ENERGY STRATEGY, BOTH BECAUSE OF THE EXTENT OF OUR RESERVES AND ITS POTENTIAL FOR ECONOMIC DEVELOPMENT. HOWEVER ITS ABILITY TO CAPTURE A GREATER SHARE OF OUR PRIMARY ENERGY MIX DEPENDS ON THE SUCCESSFUL DEMONSTRATION AND COMMERCIALIZATION OF NEW COAL UTILIZATION TECHNOLOGIES SUCH AS FLUIDIZED BED COMBUSTION AND COAL LIQUEFACTION.

FLUIDIZED BED COMBUSTION (FBC) IS AN ADVANCED TECHNOLOGY BECOMING AVAILABLE TO THE ELECTRICAL UTILITY INDUSTRY AS AN ALTERNATIVE TO CONVENTIONAL PULVERIZED COAL FIRED SYSTEMS. FBC TECHNOLOGY PROVIDES EQUALLY HIGH REMOVAL OF ACID GASES AS SCRUBBERS, WITH THE PROMISE OF SUBSTANTIALLY LOWER COST. THE UNITED STATES DEPARTMENT OF ENERGY RANKS FLUIDIZED BED COMBUSTION HIGH IN TECHNICAL MATURITY, HIGH TO VERY HIGH IN APPLICABILITY AND MEDIUM TO HIGH IN BOTH COST EFFECTIVENESS AND ENVIRONMENTAL PERFORMANCE.

THERE ARE NO UTILITY SCALE UNITS (150 MEGAWATTS OR LARGER) IN OPERATION IN CANADA OR ELSEWHERE ALTHOUGH SMALLER SCALE DEMONSTRATIONS HAVE BEEN INITIATED IN NOVA SCOTIA AND NEW BRUNSWICK. WITHOUT ANY REALISTIC OPTIONS OTHER THAN COAL FOR ELECTRICAL GENERATION, NOVA SCOTIA IS A LOGICAL CHOICE TO DEMONSTRATE THE FIRST SUCH UNIT. ITS SUCCESSFUL OPERATION USING CAPE BRETON COALS WILL PROVIDE BENEFITS TO BOTH THE REGION AND TO CANADA AS A WHOLE. IT WILL MEAN THAT COAL FIRED GENERATION WILL REMAIN A COST-EFFECTIVE OPTION FOR OTHER CANADIAN UTILITIES IN SPITE OF INCREASINGLY STRICT ENVIRONMENTAL STANDARDS. BY DOING SO IT WILL HELP TO ENSURE A MARKET FOR DOMESTIC COAL FROM ALL COAL PRODUCING REGIONS IN CANADA. IT WILL ALSO MEAN JOBS AND A CLEAN, HEALTHIER ENVIRONMENT.

THERE IS BOTH TECHNICAL RISK AND FINANCIAL RISK INVOLVED WHENEVER A TECHNOLOGY IS BEING DEMONSTRATED ON A SIZE SCALE NOT USED BEFORE. IT HAS ALWAYS BEEN RECOGNIZED THAT WITHIN THE ENERGY SECTOR THOSE RISKS SHOULD BE SHARED IN RELATIONSHIP TO THE POTENTIAL BENEFICIARIES. THE BENEFITS OF A UTILITY SCALE DEMONSTRATION OF FLUIDIZED BED COMBUSTION CLEARLY ACCRUE TO CANADA AS A WHOLE, NOT JUST TO NOVA SCOTIA OR THE ATLANTIC REGION. THEREFORE IT IS INCUMBENT UPON THE FEDERAL GOVERNMENT TO SUPPORT SUCH A DEMONSTRATION. WE BELIEVE THAT A CONTRIBUTION EQUIVALENT TO THE DIFFERENCE BETWEEN THE VALUE OF THE ENERGY PRODUCED TO THE UTILITY AND THE COST OF GENERATION FROM A CIRCULATING FLUIDIZED BED UNIT OVER A SUITABLE DEMONSTRATION PERIOD WOULD BE APPROPRIATE. SUCH A CONTRIBUTION RECOGNIZES BOTH THE RISKS INHERENT IN DEMONSTRATING ANY NEW PROCESS AND THE BENEFITS WHICH ARE NATIONAL IN SCOPE.

WHILE COAL USE IN THE UTILITY SECTOR IS A NECESSITY FOR NOVA SCOTIA, COAL ALSO HAS THE POTENTIAL TO DISPLACE FUEL OIL IN THE REGION'S INDUSTRIAL BOILER MARKET THROUGH THE USE OF COAL-LIQUID FUELS (CARBOFUEL).

IN THE LONGER TERM CAPE BRETON COALS HAVE SHOWN GREAT PROMISE AS A FEEDSTOCK FOR COAL LIQUEFACTION TO PRODUCE SYNTHETIC TRANSPORTATION FUELS. OUR FUTURE NEED FOR IMPORTED OIL WILL TO A LARGE EXTENT BE INFLUENCED BY OUR SUCCESS IN EXPLOITING THE TECHNOLOGIES AVAILABLE IN THIS FIELD. THIS WILL IN TURN REQUIRE A SUSTAINED PROGRAM OF RESEARCH, DEVELOPMENT AND DEMONSTRATION INVOLVING CAPE BRETON COALS. AGAIN WE BELIEVE THAT THEIR POTENTIAL IMPACT ON THE REGION'S ENERGY SECURITY AND ECONOMIC DEVELOPMENT UNQUESTIONABLY JUSTIFY CONTINUED FEDERAL SUPPORT OF THESE ACTIVITIES.

IN NOVA SCOTIA FOREST BIOMASS IN THE FORM OF LOGGING WASTES AND MATERIAL FROM SILVICULTURAL OPERATIONS COULD DISPLACE AS MUCH AS 3 MILLION BARRELS OF OIL ANNUALLY. THIS AMOUNTS TO MORE THAN 20 PER CENT OF OUR 1985 NON-TRANSPORTATION DEMAND FOR REFINED PETROLEUM PRODUCTS. THEREFORE WOOD ENERGY HAS THE POTENTIAL TO HAVE A SIGNIFICANT IMPACT ON OUR NEED FOR CRUDE OIL IMPORTS IN NOVA SCOTIA. THE SAME CAN SAFELY BE SAID FOR THE OTHER ATLANTIC PROVINCES.

FOREST BIOMASS ENERGY HAS BEEN ACTIVELY PURSUED WITH SUCCESS IN NOVA SCOTIA FOR THE PAST 10 YEARS. SINCE 1979 WOOD USE HAS GROWN FROM 1.9 PER CENT OF OUR PRIMARY ENERGY SUPPLY TO 5.3 PER CENT IN 1985. IN TERMS OF END-USE ENERGY, IT NOW PROVIDES ALMOST 8.5 PER CENT OF OUR REQUIREMENTS. IN SPITE OF THIS, THERE IS A LARGE OPPORTUNITY FOR FURTHER GROWTH. THE PROVINCIAL GOVERNMENT HAS EMBARKED ON A COMPREHENSIVE PROGRAM TO ENSURE THAT THE ENERGY, FOREST MANAGEMENT AND ECONOMIC BENEFITS OF WOOD CHIP ENERGY ARE REALIZED. WE WOULD ENCOURAGE THE FEDERAL GOVERNMENT TO CONTINUE TO WORK WITH US TO ENSURE THAT BIOMASS ENERGY MAKES THE CONTRIBUTION THAT IT SHOULD TO CANADA'S ENERGY SECURITY.

REGARDLESS OF HOW WE ATTEMPT TO ALTER OUR ENERGY SUPPLY MIX, ONE OF THE MOST IMPORTANT CONTRIBUTIONS THAT WE CAN ALL MAKE TO CANADA'S ENERGY SECURITY IS TO COMMIT OURSELVES TO USING THESE RESOURCES IN THE MOST EFFICIENT MANNER POSSIBLE. IN NOVA SCOTIA THE GOVERNMENT IS PROVIDING LEADERSHIP IN THIS AREA BY SETTING AN EXAMPLE FOR OTHERS TO FOLLOW. OUR TARGET IS TO REDUCE ENERGY USE IN THOSE FACILITIES OWNED OR OPERATED WITH GOVERNMENT FUNDING BY 10 PER CENT OR \$5 MILLION ANNUALLY OVER THE NEXT FIVE YEARS. WE HAVE LAUNCHED A FAR RANGING, COORDINATED PROGRAM TO ACHIEVE THAT GOAL WITH A SUBSTANTIAL COMMITMENT OF FUNDS AND MANPOWER.

THE OPPORTUNITIES IN THE INDUSTRIAL, COMMERCIAL, INSTITUTIONAL, RESIDENTIAL AND TRANSPORTATION SECTORS ARE EQUALLY GREAT. THROUGH DEMONSTRATIONS OF NEW TECHNOLOGIES, TECHNOLOGY TRANSFER, TRAINING AND EDUCATION, AND SELECTIVE FINANCIAL INCENTIVES WE CAN GO A LONG WAY TOWARDS ENSURING THAT THE POTENTIAL FOR ENERGY EFFICIENCY IS REALIZED.

THE FEDERAL GOVERNMENT IS TO BE COMMENDED ON THE NATIONAL CONSERVATION AND ALTERNATE ENERGY INITIATIVE WHICH SUPPORTS JOINT PROGRAMS AND ACTIVITIES WITH THE PROVINCES AND TERRITORIES RELATED TO ENERGY CONSERVATION AND ALTERNATIVE SOURCES OF ENERGY. IN SPITE OF THIS INITIATIVE, SUBSTANTIAL OPPORTUNITIES REMAIN TO IMPROVE ENERGY EFFICIENCY IF WE AS GOVERNMENTS CAN PROPERLY IDENTIFY AND ADDRESS THE BARRIERS WHICH EXIST. I BELIEVE THAT WITH OUR PROJECTED SHORTFALL IN DOMESTIC CRUDE OIL SUPPLY IN THE 1990'S, IT IS MORE IMPORTANT THAN EVER TO CONTINUE TO STRIVE FOR ENERGY EFFICIENCY. THEREFORE NOVA SCOTIA STRONGLY ENDORSES FEDERAL GOVERNMENT INTENTIONS TO CONTINUE JOINT ACTIVITIES IN THIS AREA BEYOND MARCH 31, 1988.

IN CONCLUSION, SUPPLY SECURITY FOR ATLANTIC CANADA INVOLVES THE DEVELOPMENT AND UTILIZATION OF ALL OF OUR INDIGENOUS RESOURCES - OFFSHORE OIL AND NATURAL GAS, COAL, FOREST BIOMASS, HYDRO AND PEAT. IT ALSO MEANS A CONTINUING EFFORT TO ENSURE THAT OUR RESOURCES ARE USED IN THE MOST EFFICIENT MANNER. WITH REFINED PETROLEUM PRODUCTS STILL DOMINANT IN OUR ENERGY SUPPLY MIX AND WITH OUR TOTAL RELIANCE ON IMPORTED SOURCES FOR CRUDE OIL, WE ARE THE MOST VULNERABLE REGION IN CANADA. FEDERAL SUPPORT FOR RESEARCH, DEVELOPMENT AND DEMONSTRATION, TOGETHER WITH FISCAL INCENTIVES FOR GAS AND OIL DEVELOPMENT, ARE IN BOTH THE REGIONAL AND NATIONAL INTEREST. ATLANTIC CANADA HAS THE POTENTIAL TO GREATLY INCREASE ITS ENERGY SECURITY AND AT THE SAME TIME BENEFIT FROM ENHANCED ECONOMIC DEVELOPMENT. ALL THAT IS NEEDED IS THE POLITICAL WILL TO RECOGNIZE OUR NEEDS AND TO TAKE ADVANTAGE OF THE OPPORTUNITIES.